Amendments to the Claims are reflected in the listing of claims that begins on page 4 of this paper.

REMARKS/ARGUMENTS begin on page 23 of this paper.

An attachment follows page 28 of this paper. This attachment includes an Abstract of the Disclosure.

Amendments to the Claims

The following listing of claims replaces all prior versions of the claims and all prior listings of the claims in the present application.

Claims 1-38 (canceled)

Claim 39 (currently amended): A method of making a tire, comprising:

making a carcass structure;

applying a belt structure to the carcass structure at a ~~circumferentially external~~ circumferentially external position of the carcass structure;

applying a tread band to the belt structure at a ~~circumferentially external~~ circumferentially external position of the belt structure;

applying at least one pair of sidewalls to the carcass structure at ~~laterally opposite~~ laterally opposite positions; and

vulcanizing the tire;

wherein making the carcass structure involves formation of at least one first carcass ply, comprising:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections;

wherein each respective deposition section extends in a substantially U-shaped conformation against a profile in transverse section of the toroidal support or a ~~previously-deposited~~ previously deposited deposition section, substantially over an entire length of the respective deposition section, to define:

two side portions ~~and a crown portion, wherein the side portions~~ that substantially extend in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction[[,]];

~~wherein the~~ a crown portion that extends in a ~~radially-external~~ radially external position ~~between the side portions~~[[,]] in a plane substantially parallel to the geometric axis of rotation of the toroidal support; and

two mutually-axially-spaced-apart transition regions that are defined between the side portions and the crown portion, respectively;

wherein the crown portions of [[each]] the deposition sections [[is]] are arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support,

wherein edges of circumferentially consecutive deposition sections abut evenly along their entire crown portions extending between the transition regions, and

wherein the side portions of each deposition section partly overlap or are [[each]] partly overlapped [[with]] by a side portion of at least one consecutive deposition section.

Claim 40 (previously presented): The method of claim 39, wherein the side portions in mutual-overlapping relationship mutually converge toward the geometric axis of rotation of the toroidal support.

Claim 41 (currently amended): The method of claim 39, wherein mutual overlapping of the side portions of the deposition sections progressively decreases starting from a maximum value at ~~radially inner~~ radially inner ends of the side portions until a zero value is reached at the transition regions ~~between the side portions and the crown portion~~.

Claim 42 (previously presented): The method of claim 39, wherein the side portions in mutual-overlapping relationship are joined to each other at a bending end region where the at least one strip element is folded upon itself.

Claim 43 (previously presented): The method of claim 39, wherein each deposition section is sequentially laid down onto the toroidal support according to a circumferential distribution pitch corresponding to a width of the at least one strip element.

Claim 44 (previously presented): The method of claim 39, wherein each deposition section is sequentially laid down onto the toroidal support according to a circumferential distribution pitch corresponding to a multiple of a width of the at least one strip element.

Claim 45 (currently amended): The method of claim 39, wherein formation of the at least one first carcass ply further comprises ~~the step of~~ pressing the at least one strip element at the side portions of the deposition sections to define regions of greater width close to ~~radially inner~~ radially inner circumferential edges of the carcass structure.

Claim 46 (currently amended): A method of making a tire, comprising:

making a carcass structure;

applying a belt structure to the carcass structure at a ~~circumferentially external~~ circumferentially external position of the carcass structure;

applying a tread band to the belt structure at a ~~circumferentially external~~ circumferentially external position of the belt structure;

applying at least one pair of sidewalls to the carcass structure at ~~laterally opposite~~ laterally opposite positions; and

vulcanizing the tire;

wherein making the carcass structure involves formation of at least one carcass ply, comprising:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections;

wherein each deposition section extends in a substantially U-shaped conformation against a profile in transverse section of the toroidal support or a ~~previously-deposited~~ previously deposited deposition section to define two side portions and a crown portion,

wherein the side portions substantially extend in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction,

wherein the crown portion extends in a ~~radially-external~~ radially external position between the side portions,

wherein the crown portions of [[each]] the deposition sections [[is]] are arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support,

wherein the side portions of each deposition section partly overlap or are [[each]] partly overlapped [[with]] by a side portion of at least one consecutive deposition section,

wherein formation of the at least one carcass ply further comprises pressing the at least one strip element at the side portions of the deposition sections to define regions of greater width close to ~~radially-inner~~ radially inner circumferential edges of the carcass structure, and

wherein the pressing is carried out on the at least one strip element during depositing the at least one continuous strip element by exerting a pressing action on a section of the at least one strip element before that section is deposited onto the toroidal support.

Claim 47 (currently amended): The method of claim 45, wherein concurrently with [[the]] pressing [[step]] the at least one strip element, the thread elements comprised within the at least one strip element are mutually moved apart.

Claim 48 (currently amended): The method of claim 39, wherein during ~~the deposition step~~ depositing the at least one strip element, at least one deposition section comprising an initial or leading end of the at least one strip element is retained on the toroidal support by a suction action produced through the toroidal support.

Claim 49 (currently amended): The method of claim 39, wherein depositing each strip element onto [[a]] the toroidal support comprises ~~the steps of~~:

guiding the strip element on a distributor element movable about the profile in transverse section of the toroidal support;

translating the distributor element substantially radially away from the geometric axis of rotation of the toroidal support to form a first side portion of the deposition section of the strip element;

rotating the toroidal support relative to the distributor element according to an angular pitch corresponding to ~~one half~~ one half of a distribution pitch of the deposition section, concurrently with formation of the first side portion;

translating the distributor element substantially in a direction parallel to the geometric axis of rotation of the toroidal support to form the crown portion of the deposition section of the strip element;

translating the distributor element substantially radially close to the geometric axis of rotation of the toroidal support to form a second side portion of the deposition section of the strip element; and

rotating the toroidal support relative to the distributor element according to the angular pitch, concurrently with formation of the second side portion.

Claim 50 (currently amended): The method of claim 49, wherein during formation of the first side portion of each deposition section, ~~a step of retaining~~ the strip element is retained at a bending region defined between the first side portion and a second side portion of a previously formed deposition section ~~is carried out~~.

Claim 51 (previously presented): The method of claim 50, wherein retention of the strip element is carried out by arranging a retaining element alongside the second side portion after translation of the distributor element radially close to the geometric axis of rotation of the toroidal support, so that the strip element is turned back about the retaining element, forming the bending region as a result of translation of the distributor element radially away from the geometric axis of rotation of the toroidal support.

Claim 52 (previously presented): The method of claim 51, wherein the retaining element is axially disengaged from the bending region after beginning formation of the crown portion of the deposition section being deposited.

Claim 53 (currently amended): The method of claim 39, further comprising ~~the step of~~ pressing the side portions of the deposition sections against side walls of the toroidal support.

Claim 54 (currently amended): The method of claim 53, wherein [[the]] pressing [[step]] the side portions is carried out repeatedly on first and second side portions ~~belonging to~~ of two contiguous deposition sections.

Claim 55 (currently amended): The method of claim 39, further comprising ~~the step of~~ applying at least one inextensible annular structure to an area close to inner circumferential edges of the at least one first carcass ply.

Claim 56 (currently amended): The method of claim 55, further comprising ~~the step of~~ turning back end flaps of the side portions about respective inextensible annular structures.

Claim 57 (currently amended): The method of claim 39, further comprising ~~the step of~~ forming a second carcass ply in a similar manner to formation of the at least one first carcass ply.

Claims 58-66 (canceled)

Claim 67 (currently amended): The method of claim 39, wherein ~~the step of~~ applying the tread band comprises circumferentially winding at least one continuous sheet of raw elastomeric material about the belt structure in a plurality of ~~radially superposed~~ radially superposed coils.

Claim 68 (currently amended): The method of claim 67, wherein the at least one continuous sheet of elastomeric material is produced during winding of the at least one continuous sheet of [[raw]] elastomeric material about the belt structure.

Claim 69 (currently amended): The method of claim 67, further comprising ~~the step of~~ progressively reducing a width of the at least one continuous sheet of elastomeric material concurrently with winding each coil about the belt structure.

Claim 70 (previously presented): The method of claim 39, wherein each of the sidewalls is made by injection of elastomeric material into a mold.

Claim 71 (currently amended): The method of claim 70, wherein making each sidewall comprises ~~the steps of~~:

injecting a first elastomeric material into a first cavity defined in the mold to form a ~~radially outer~~ radially outer portion of the sidewall;

defining a second cavity in the mold, partly delimited by the ~~radially outer~~ radially outer portion of the sidewall; and

injecting a second elastomeric material into the second cavity of the mold to define a ~~radially inner~~ radially inner portion of the sidewall.

Claim 72 (currently amended): The method of claim 39, wherein formation of the at least one first carcass ply is preceded by ~~the step of~~ coating the toroidal support with at least one air-proof layer or liner of elastomeric material.

Claim 73 (currently amended): The method of claim 72, wherein [[the]] coating [[step]] the toroidal support comprises winding at least one ribbon band of an air-proof elastomeric material in coils arranged in side-by-side relationship along the profile in transverse section of the toroidal support.

Claim 74 (currently amended): The method of claim 39, wherein ~~before the vulcanization step~~[[,]] the following [[steps]] are carried out before vulcanizing the tire:

disengaging the tire from the toroidal support; and

inserting an air tube into the carcass structure.

Claim 75 (currently amended): The method of claim 39, wherein during ~~the vulcanization step~~ vulcanizing the tire, ~~a step of stretching~~ the at least one first carcass ply and the belt structure ~~is carried out for achieving~~ are stretched to achieve an expansion of the tire of a linear amount between 2% and 5%.

Claim 76 (currently amended): A method of making a tire, comprising:

making a carcass structure;

applying a belt structure to the carcass structure at a ~~circumferentially external~~ circumferentially external position of the carcass structure;

applying a tread band to the belt structure at a ~~circumferentially external~~ circumferentially external position of the belt structure;

applying at least one pair of sidewalls to the carcass structure at ~~laterally opposite~~ laterally opposite positions;

applying at least one inextensible annular structure to an area close to inner circumferential edges of at least one carcass ply; and

vulcanizing the tire;

wherein making the carcass structure involves formation of the at least one carcass ply, comprising:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections;

wherein each respective deposition section extends in a substantially U-shaped conformation against a profile in transverse section of the toroidal support or a ~~previously deposited~~ previously deposited deposition section, substantially over an entire length of the respective deposition section, to define:

two side portions ~~and a crown portion, wherein the side portions~~ that substantially extend in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction[[,]];

~~wherein the~~ a crown portion that extends in a ~~radially external~~ radially external position ~~between the side portions~~[[,]] in a plane substantially parallel to the geometric axis of rotation of the toroidal support; and

two mutually-axially-spaced-apart transition regions that are defined between the side portions and the crown portion, respectively;

wherein the crown portions of [[each]] the deposition sections [[is]] are arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support,

wherein edges of circumferentially consecutive deposition sections abut evenly along their entire crown portions extending between the transition regions,

wherein the side portions of each deposition section partly overlap or are [[each]] partly overlapped [[with]] by a side portion of at least one consecutive deposition section, and

wherein the formation of the at least one carcass ply occurs before applying the at least one inextensible annular structure to the area close to the inner circumferential edges of the at least one carcass ply.

Claim 77 (currently amended): A method of making a tire, comprising:

making a carcass structure;

applying a belt structure to the carcass structure at a ~~circumferentially external~~ circumferentially external position of the carcass structure;

applying a tread band to the belt structure at a ~~circumferentially external~~ circumferentially external position of the belt structure;

applying at least one pair of sidewalls to the carcass structure at ~~laterally opposite~~ laterally opposite positions; and

vulcanizing the tire;

wherein making the carcass structure involves formation of at least one carcass ply, comprising:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections;

wherein each respective deposition section extends in a substantially U-shaped conformation against a profile in transverse section of the toroidal support or a ~~previously deposited~~ previously deposited deposition section, substantially over an entire length of the respective deposition section, to define:

two side portions ~~and a crown portion, wherein the side portions~~ that substantially extend in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction[[,]];

~~wherein the~~ a crown portion that extends in a ~~radially external~~ radially external position ~~between the side portions~~[[,]] in a plane substantially parallel to the geometric axis of rotation of the toroidal support; and

two mutually-axially-spaced-apart transition regions that are defined between the side portions and the crown portion, respectively;

wherein the crown portions of [[each]] the deposition sections [[is]] are arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support,

wherein edges of circumferentially consecutive deposition sections abut evenly along their entire crown portions extending between the transition regions,

wherein the side portions of each deposition section partly overlap or are [[each]] partly overlapped [[with]] by a side portion of at least one consecutive deposition section, and

wherein the at least one continuous strip element is deposited onto an exterior surface of the toroidal support or a ~~previously-deposited~~ previously deposited deposition section.

Claim 78 (currently amended): A method of making a tire, comprising:

making a carcass structure;

applying a belt structure to the carcass structure at a ~~circumferentially-external~~ circumferentially external position of the carcass structure;

applying a tread band to the belt structure at a ~~circumferentially-external~~ circumferentially external position of the belt structure;

applying at least one pair of sidewalls to the carcass structure at ~~laterally opposite~~ laterally opposite positions; and

vulcanizing the tire;

wherein making the carcass structure involves formation of at least one first carcass ply, comprising:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections;

wherein each respective deposition section extends in a substantially U-shaped conformation against a profile in transverse section of the toroidal support or a ~~previously-deposited~~ previously deposited deposition section, substantially over an entire length of the respective deposition section, to define:

two side portions ~~and a crown portion, wherein the side portions~~ that substantially extend in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction[[,]];

~~wherein the~~ a crown portion that extends in a ~~radially external~~ radially external position ~~between the side portions~~[[,]] in a plane substantially parallel to the geometric axis of rotation of the toroidal support; and

two mutually-axially-spaced-apart transition regions that are defined between the side portions and the crown portion, respectively;

wherein the crown portions of [[each]] the deposition sections [[is]] are arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support,

wherein edges of circumferentially consecutive deposition sections abut evenly along their entire crown portions extending between the transition regions,

wherein the side portions of each deposition section partly overlap or are [[each]] partly overlapped [[with]] by a side portion of at least one consecutive deposition section, and

wherein the crown portions of consecutive deposition sections are parallel to each other.

Claim 79 (currently amended): A method of making a tire, comprising:

making a carcass structure;

applying a belt structure to the carcass structure at a ~~circumferentially external~~ circumferentially external position of the carcass structure;

applying a tread band to the belt structure at a ~~circumferentially external~~ circumferentially external position of the belt structure;

applying at least one pair of sidewalls to the carcass structure at ~~laterally opposite~~ laterally opposite positions; and

vulcanizing the tire;

wherein making the carcass structure involves formation of at least one carcass ply, comprising:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections;

wherein each respective deposition section extends in a substantially U-shaped conformation against a profile in transverse section of the toroidal support or a ~~previously-deposited~~ previously deposited deposition section, substantially over an entire length of the respective deposition section, to define:

two side portions ~~and a crown portion, wherein the side portions~~ that substantially extend in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction[[,]];

~~wherein the~~ a crown portion that extends in a ~~radially external~~ radially external position ~~between the side portions~~[[,]] in a plane substantially parallel to the geometric axis of rotation of the toroidal support; and

two mutually-axially-spaced-apart transition regions that are defined between the side portions and the crown portion, respectively;

wherein the crown portions of [[each]] the deposition sections [[is]] are arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support,

wherein edges of circumferentially consecutive deposition sections abut evenly along their entire crown portions extending between the transition regions,

wherein the side portions of each deposition section partly overlap or are [[each]] partly overlapped [[with]] by a side portion of at least one consecutive deposition section, and

wherein a crown section of each carcass ply comprises a single layer of the deposition sections.

Claim 80 (currently amended): A method of making a tire, comprising:

making a carcass structure;

applying a belt structure to the carcass structure at a ~~circumferentially external~~ circumferentially external position of the carcass structure;

applying a tread band to the belt structure at a ~~circumferentially external~~ circumferentially external position of the belt structure;

applying at least one pair of sidewalls to the carcass structure at ~~laterally opposite~~ laterally opposite positions; and

vulcanizing the tire;

wherein making the carcass structure involves formation of at least one carcass ply, comprising:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections;

wherein each respective deposition section extends in a substantially U-shaped conformation against a profile in transverse section of the toroidal support or a ~~previously-deposited~~ previously deposited deposition section, substantially over an entire length of the respective deposition section, to define:

two side portions ~~and a crown portion, wherein the side portions~~ that substantially extend in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction[[,]];

~~wherein the~~ a crown portion that extends in a ~~radially-external~~ radially external position ~~between the side portions~~[[,]] in a plane substantially parallel to the geometric axis of rotation of the toroidal support; and

two mutually-axially-spaced-apart transition regions that are defined between the side portions and the crown portion, respectively;

wherein the crown portions of [[each]] the deposition sections [[is]] are arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support,

wherein edges of circumferentially consecutive deposition sections abut evenly along their entire crown portions extending between the transition regions, and

wherein, for consecutive deposition sections, a side portion of a second-deposited section disposed farther from an equatorial plane of the tire overlaps a side portion of a first-deposited section disposed closer to the equatorial plane of the tire.